ORIGALINE CATALOG

Accessories for electrochemical analytical systems

www.origalys.com

Summary

Our expertise

Specialist in electrochemical analysis and measurement devices.

Designing, manufacturing & selling of analytical instruments in Electrochemistry.

- Potentiostats / Galvanostats / Impedance meters
- Conductivity meters / pH-meters
- Electrochemical multiplexer
- Electrode range : REF / AUX / WORK...
- Cell range
- Complete range of accessories

French quality and international presence

Customers worldwide	Products designed and manufactured in France	5-year warranty	International distributors	90% of our components are designed in the Auvergne Rhône-Alpes region.

Over 75 years of experience in electrochemistry

1946

Tacussel

1988

Radiometer

2010

OrigaLys

Our values

Caring about people

Participative management / Team-building / Trust / Solidarity / Evolution

Innovate sustainably & differently

Initiative - Eco conception - Repairability - Sustainability - Performance

Share & transmit

Experiences - Preserve our know-how - Transmit - Train

Our services

Radiometer's Maintenance

As former Radiometer and Tacussel designers, we are qualified to provide a repair diagnosis for all your Radiometer Analytical and Tacussel instruments.

VoltaLab Range : PST006, PGZ100, PGP201, PST050, PGZ301 ou PGZ402.

Rotating Disk Electrode (RDE) : EDI101.

Speed controller for RDE: CTV101.

Personalization

We design custom equipment from specifications to final product and develop tailored methods in our software.

OrigaLys can design special equipment with you, and for you.

From the first specifications to the final product, we are by your side.

We can integrate a specific method into our software.

Webinars, training & application notes

Our Experts are at your service to improve your skills, efficiency and train you using our devices as well as various applications. Also thanks to our webinars, users could deepen their knowledge and discover more solutions

To access our application notes:

BioMetriz: expert in biofilm analysis

BioMetriz was founded in Poitiers by researchers from ENSIP. BioMetriz joined OrigaLys in 2020. Thanks to its expertise, OrigaLys launched the Biofilm Monitor in 2021. It was BioMetriz's first product.

Innovative solution for biofilm analysis.

Learn more about your water sample.

Adapt your treatment against biofilms thanks to our analysis kits.

Choose our preventive solution.

Teaching Prize

For 14 years, we have encouraged innovation in the teaching of electrochemistry with the teaching prize awarded during the Electrochemistry Days.

Teaching Prize 2022

8 devices offered: 4 OpH218 and 4 OCD218 for teaching.

Partnership with the French Chemical Society.

Support for Ukraine: donation to Taras Shevchenko University, Kyiv.

ORIGA-DAY : Training by OrigaLys

Present your research topics, theses or projects during a scientific day dedicated to sharing and innovation.

Doctoral student, researcher, or industrialist?

Highlight your work to a diverse audience.

Meet experts and enrich your perspectives.

Take part in a day that connects science and industry.

They trust us!

When our solutions come to life

To access our references / articles / scientific publications:

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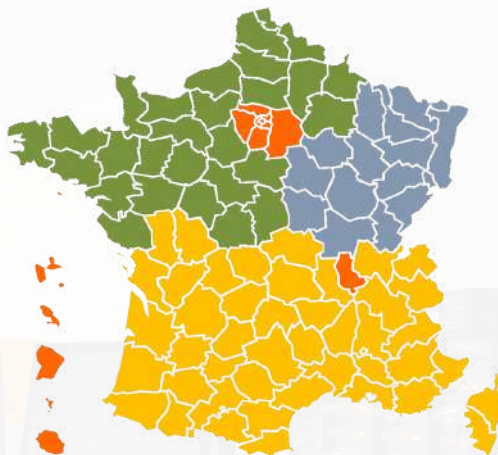
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Our partners:

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Partageons l'expérience

DEXIS
BFC

Our international network

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Sales Manager

Europe

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Find the list of our distributors on our website.

OrigaSens Range

References (REF)

A reference electrode provides a fixed potential and is distinguished by the reference element and the electrolytic junction.

Auxiliaries (AUX)

Auxiliary electrodes are distinguished by their metallic surface (Ag, Pt).
For all other materials, please contact us.

WORK

From millimeter to micrometer electrodes, from stationary to rotating, OrigaLys offers you a wide range of working electrodes.

Selective

Depending on the targeted ion, OrigaLys offers you a choice of selective, combined or non-combined electrodes for your measurements.

pH probes

To best support you in your pH measurements, we offer robust, combined or simple electrodes.

Conductivity cells

In order to guarantee you optimal conductivity measurements, we provide you with suitable conductivity cells.

Industrial

We offer two types of industrial electrodes: a reference electrode (Ag/AgCl) and an auxiliary electrode (Pt).

Other electrodes

Find here electrodes in specific application areas including the ORP Redox Ag/AgCl and Pt electrode and Karl Fisher titration.

Additional items

We offer you all kinds of solutions (filling, buffers, calibration, ISAB / TISAB) as well as extensions adapted to your electrodes.

Saturated Calomel (ECS) Reference Electrodes

S7

Screw Head S7

120 mm / 80 mm

103 mm / 70 mm

103 mm / 70 mm

Article reference	AR02319	AR02320	AR02309
Internet article code	OGR003	OGR004	OGR009
Type	XR110	REF421	REF921 non-aqueous medium
Reference System	Calomel	Calomel	Calomel
Temperature Range	-5 to 50°C	-5 to 50°C	0 to 60°C
Lower Diameter	8 mm	8 mm	8 mm
Liquid Junction	Porous Pin	Porous Pin	Porous Pin
Salt-Bridge Solution	KCl saturé	KCl saturé	LiCl 1 M
Grinded	Yes	No	No
Body	Glass	Glass	Glass

Silver Chloride Reference Electrodes

S7

Screw Head S7

103 mm | 70 mm | 120 mm | 80 mm | 120 mm | 70 mm

Article reference	AR02321	AR02322	AR02323
Internet article code	OGR005	OGR006	OGR007
Type	REF321	XR300	XR300
Reference System	Ag/AgCl	Ag/AgCl	Ag/AgCl
Temperature Range	-5 to 80°C	-5 to 80°C	-5 to 80°C
Lower Diameter	8 mm	8 mm	6 mm
Liquid Junction	Porous Pin	Porous Pin	Porous Pin
Salt-Bridge Solution	3M KCl with saturated AgCl	3M KCl with saturated AgCl	3M KCl with saturated AgCl
Grinded	No	No	No
Body	Glass	Glass	Glass

Silver Chloride Reference Electrodes

Industrial electrode

S7

Screw Head S7
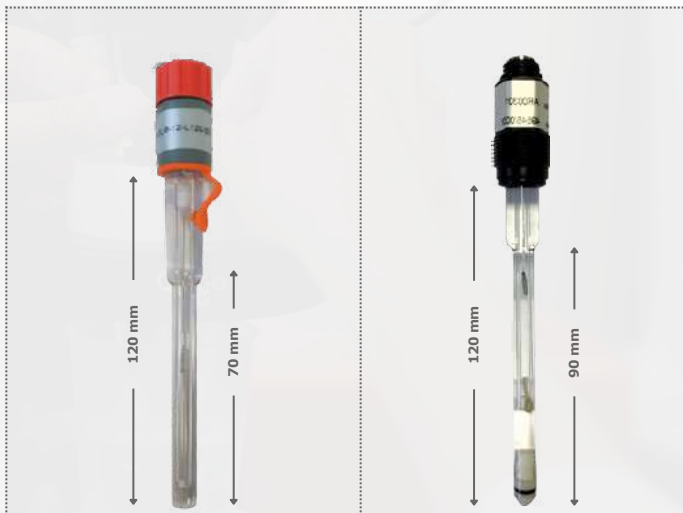
Article reference	AR02324	AR00301
Internet article code	OGR010	AR00301
Type	Double junction	Industrial
Reference System	Ag/AgCl	Ag/AgCl (gel)
Temperature Range	0 to 80°C	-5 to 80°C
Lower Diameter	8 mm	8 mm
Liquid Junction	Porous Pin	Porous Pin
Salt-Bridge Solution	3M KCl with saturated AgCl	Saturated KCl gel
Grinded	No	No
Body	Glass	Glass

Mercury Oxide Reference Electrodes

S7

Screw Head S7
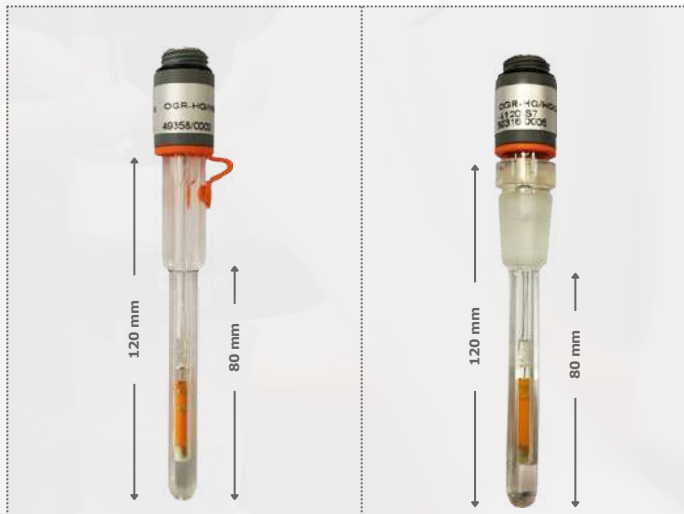
Article reference	AR02317	AR02318
Internet article code	OGR001	OGR002
Type	XR400	XR400
Reference System	Hg/HgO	Hg/HgO
Temperature Range	-5 to 60°C	-5 to 60°C
Lower Diameter	8 mm	8 mm
Liquid Junction	Porous Pin	Porous Pin
Salt-Bridge Solution	KOH 0,1M	KOH 0,1M
Grinded	No	Yes
Body	Glass	Glass

Electrodes de référence au Sulfate de Mercure

S7

Screw Head S7

120 mm   80 mm   103 mm   80 mm
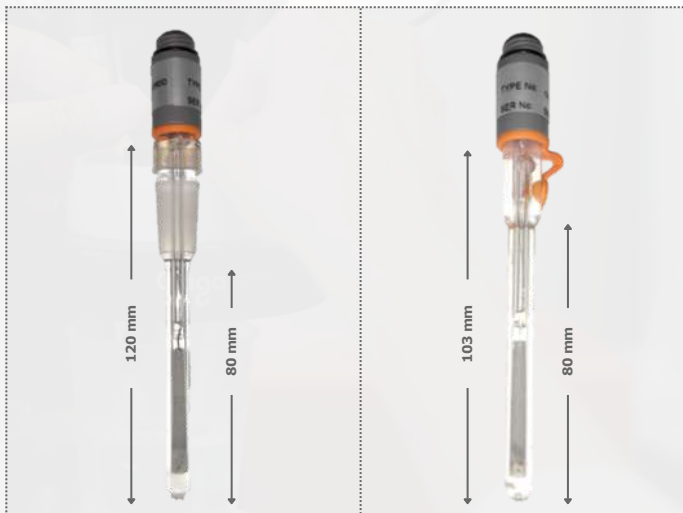
Article reference	AR02313	AR02350
Internet article code	OGR011	OGR012
Type	–	REF621
Reference System	Hg/Hg$_2$SO$_4$	Hg/Hg$_2$SO$_4$
Temperature Range	0 to 60°C	0 to 60°C
Lower Diameter	8 mm	6 mm
Liquid Junction	Porous Pin	Porous Pin
Salt-Bridge Solution	Hg$_2$SO$_4$	Hg$_2$SO$_4$
Grinded	Yes	No
Body	Glass	Glass

RedRod Reference Electrode

S7

Screw Head S7

103 mm

Article reference	AR02314
Internet article code	OGR008
Type	REF201
Reference System	RedRod
Temperature Range	-5 to 80°C
Lower Diameter	8 mm
Liquid Junction	Porous Pin
Salt-Bridge Solution	Saturated KCl
Grinded	No
Body	Glass

Copper Sulfate Reference Electrode

S7

Screw Head S7

110 mm

85 mm

Article reference	AR02352
Internet article code	OGR013
Type	Cu/CuSO^4
Reference System	0 to 60°C
Temperature Range	8 mm
Lower Diameter	Porous Pin
Liquid Junction	CuSO$_4$
Salt-Bridge Solution	No
Grinded	Glass

How to properly store reference electrodes?

STEP 1

Clean the exterior of the electrode with distilled water.
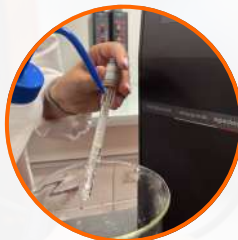
STEP 2

Empty the electrode and rinse the inside with distilled water to remove crystals.

STEP 3

Take the appropriate filling solution (see p. 56)

STEP 4

Fill the electrode with the filling solution.

STEP 5

Close the electrode cap and cover it with parafilm.

STEP 6

Put some solution into the cap.

STEP 7

Insert the electrode cap and cover it with parafilm.

Salt-bridge
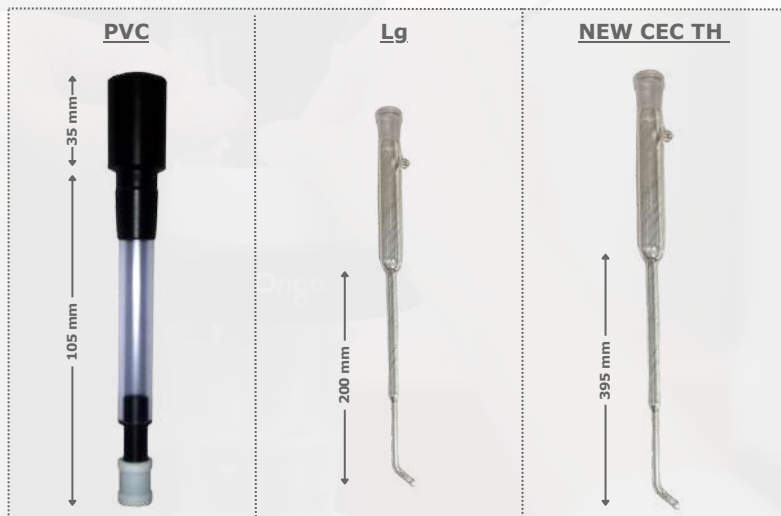
	PVC	Lg	NEW CEC TH
S7			
Screw Head S7			
Article reference	**AR00865**	**AR00269**	**AR01637**
Internet article code	AR00865	AR00269	AR01637
Type	-	ALS145	-
Grinded	NS14/15	-	-
Temperature Range	-10 to 105°C	-	-
Lower Diameter	12 mm	-	-
Body	PVC	Glass	Glass
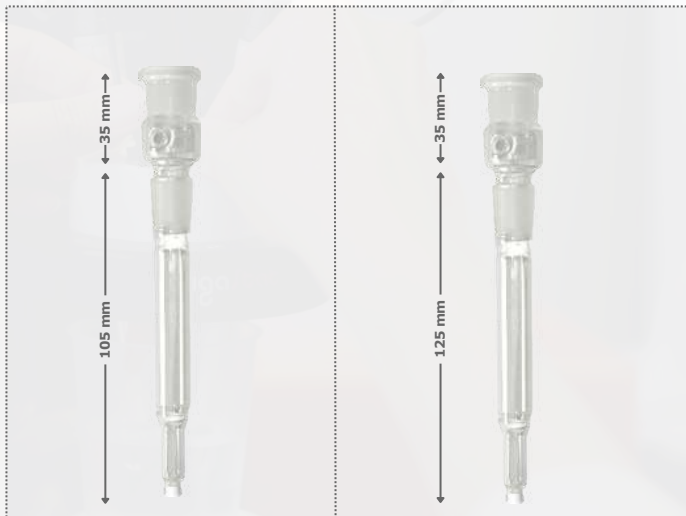
Article reference	AR01382	AR01383
Internet article code	AR01382	AR01383
Type	AL120	AL140
Grinded	RIN14/23	RIN14/23
Temperature Range	-10 to 105°C	-10 to 105°C
Lower Diameter	8 mm	12 mm
Liquid Junction	Porous Pin	Porous Pin
Body	Glass	Glass

Silver (Ag) Bar Auxiliary Electrode

S7

Screw Head S7

Article reference	AR02310
Internet article code	OGV001
Type	M291Ag
Sensitive element	Silver bar ø: 3 mm Length: 10 mm
Temperature Range	0 to 80°C
Lower Diameter	8 mm
Grinded	No
Body	Glass

Platinum Wire (Pt) Auxiliary Electrode

Industrial electrode

S7

Screw Head S7

Article reference	AR00302
Internet article code	AR00302
Type	Industrial
Sensitive element	Platinium Wire ø : 1 mm Length : 10 mm
Temperature Range	-5 to 80°C
Lower Diameter	8 mm
Grinded	PG 13.5 screwing
Body	Glass

Platinum Wire (Pt) Auxiliary Electrode

S7

Screw Head S7
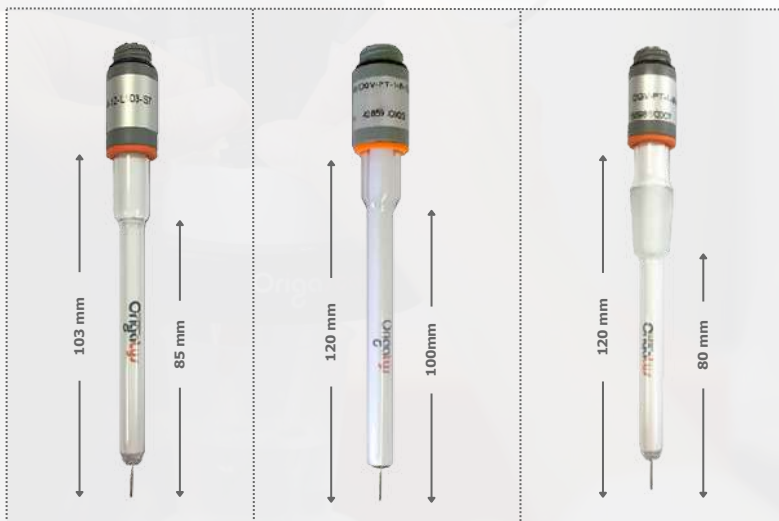
Article reference	AR02326	AR02327	AR02328
Internet article code	OGV002	OGV004	OGV005
Type	M231Pt	XM100	XM110
Sensitive element	Platinium Wire ø : 1 mm Length : 10 mm	Platinium Wire ø : 1 mm Length : 10 mm	Platinium Wire ø : 1 mm Length : 10 mm
Temperature Range	-10 to 100°C	-10 àto 100°C	-10 to 100°C
Lower Diameter	8 mm	8 mm	8 mm
Grinded	No	No	Yes
Body	Glass	Glass	Glass

Platinum disc (Pt) Auxiliary Electrodes

S7

Screw Head S7

Article reference	AR02325	AR02332
Internet article code	OGV003	OGV150
Type	CE-PTD-K	XM150
Sensitive element	Platinum disc (Pt) ø: 10 mm Length: 0.3 mm	Platinum disc (Pt) ø: 10 mm Length: 0.3 mm
Temperature Range	0 to 80°C	-10 to 100° C
Lower Diameter	10 mm	12 mm
Grinded	Yes	No

Platinum Plate (Pt) Auxiliary Electrode

S7

Screw Head S7

103 mm

Article reference	AR02329
Internet article code	OGV006
Type	M241Pt
Sensitive element	Platinum plate (Pt) ø: 5 mm Length: 5 mm
Temperature Range	-10 to 100°C
Lower Diameter	8 mm
Grinded	No

Article reference	AR02330	AR02333
Internet article code	OGV007	OGV008
Type	XM120	XM140
Sensitive element	Platinum plate (Pt) ø: 5 mm Length: 5 mm	Platinum plate (Pt) ø: 5 mm Length: 5 mm
Temperature Range	-10 to 100°C	-10 to 100°C
Lower Diameter	8 mm	8 mm
Grinded	No	Yes

Platinum grids (Pt) - Auxiliary Electrodes

	Open platinum grid	Closed platinum grid
	152 mm	152 mm
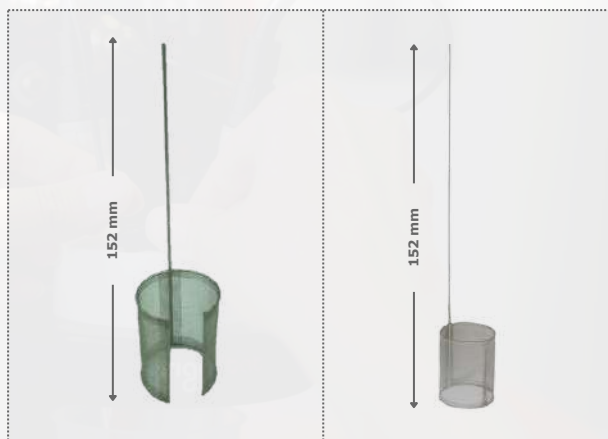
Article reference	AR01240	AR01625
Mesh	225 M/cm2	225 M/cm2
Wire diameter	0.12 mm	0.12 mm
External diameter	35 mm	35 mm

	Flared turntable grid	Platinum Grid	Spiral turntable
	150 mm	160 mm	150 mm

Article reference	AR02122	AR02451	AR02159
Mesh	225 M/cm2	225 M/cm2	-
Hoop diameter	-	1 mm	-
Number of rods	1	2	1
Rod diameter	0.12 mm	1.4 mm	-
Lower diameter	25 mm	60 mm	-
Upper diameter	35 mm	0.13 mm	-
Grid height	20 mm	-	-

Carbon/Graphite Rods - Auxiliary Electrodes

Article reference	AR00239	AR00260	AR00496	AR00497
Material	Carbon/Graphite	Carbon/Graphite	Graphite	Carbon/Graphite
Purity	99.997 %	99.997 %	99.997 %	99.997 %
Length	150 mm	150 mm	300 mm	250 mm
Lower diameter	ø5 mm	ø4 mm	ø6.4 mm	ø6.4 mm

Article reference	AR00521	AR01774	AR01775
Material	Graphite	Carbon	Carbon
Purity	99.997 %	-	-
Length	150 mm	100 mm	100 mm
Lower diameter	ø10 mm	ø10 mm	ø25 mm

Working electrodes - Micro-electrodes (UME)

Crocodile clip ø4 mm

Male banana ø4 mm
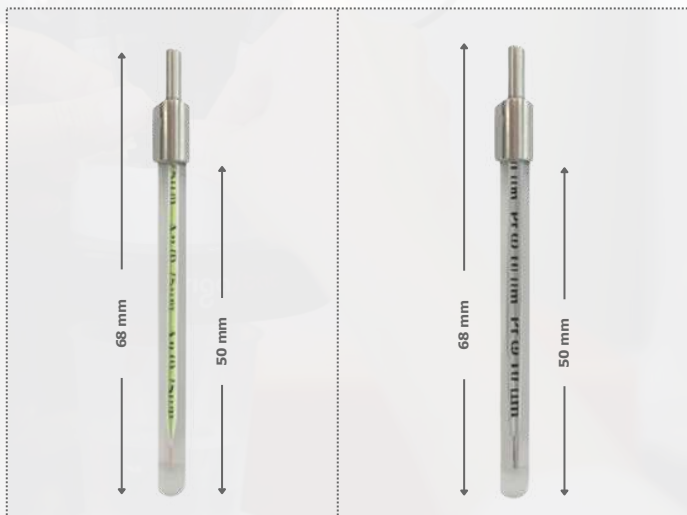
Article reference	UMEAU	UMEPT
Internet article code	UMEAU	UMEPT
Reference element	Gold (Au)	Platinum (Pt)
Temperature Range	0 to 40 °C	0 to 40 °C
Diameter (µm)	10 - 25 - 40 50 - 100 - 200	10 - 25 - 40 50 - 100 - 200
Outer diameter	5 mm	5 mm
Body	Glass	Glass
pH Range	0-12	0-12
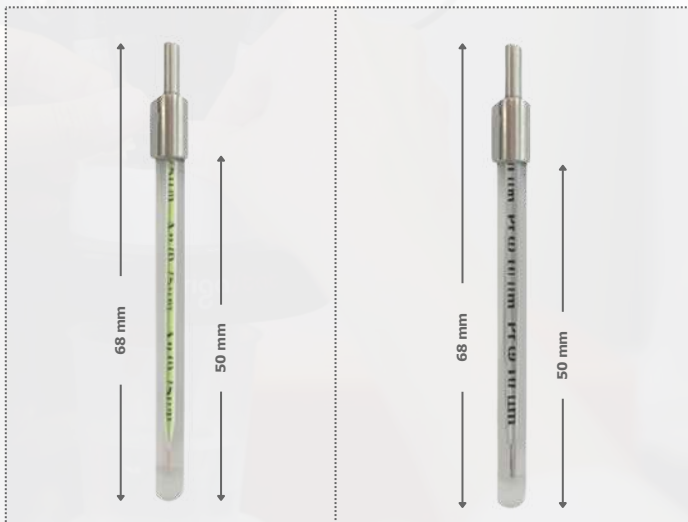
Article reference	UMEPD	UMEAG
Internet article code	UMEPD	UMEAG
Reference element	Paladium (Pd)	Silver (Ag)
Temperature Range	0 to 40 °C	0 to 40 °C
Diameter (µm)	25 - 50 - 100 - 200	25 - 50 - 100 - 200
Outer diameter	5 mm	5 mm
Body	Glass	Glass
pH Range	0-12	0-12

Working electrodes - Micro-electrodes (UME)

Crocodile clip ø4 mm

Male banana ø4 mm
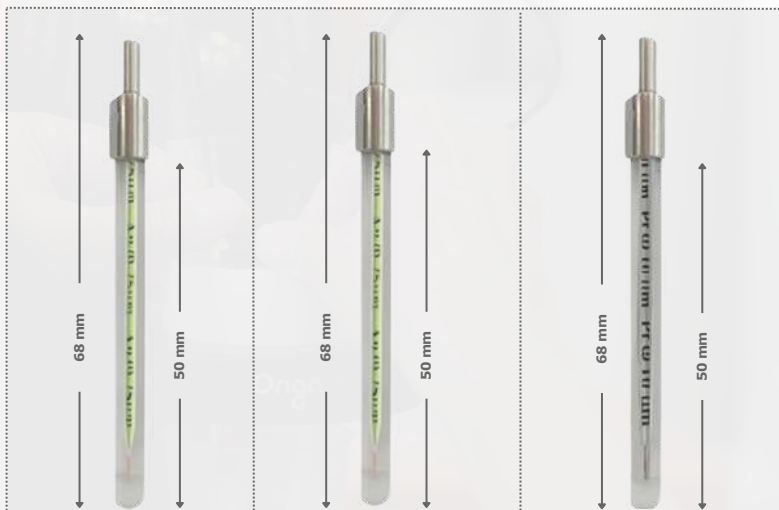
Article reference	UME75IR	UME75TI	UME50W
Internet article code	UME75IR	UME75TI	UME50W
Reference element	Irridium (Ir)	Titanium (Ti)	Tungsten (W)
Temperature Range	0 to 40 °C	0 to 40 °C	0 to 40 °C
Diameter (µm)	75	50	50
Outer diameter	5 mm	5 mm	5 mm
Body	Glass	Glass	Glass
pH Range	0-12	0-12	0-12

Implantable microelectrodes (carbon fibers)

We also offer implantable microelectrodes:

- Beveled carbon fibers in 7 µm / 30 µm
- Non-beveled carbon fibers in 7 µm / 30 µm

Thanks to their exceptional finesse, these microelectrodes can be implanted very easily. Contact us for more information.

Working electrode - Static electrode: StaTrod

Male banana ø4 mm

Article reference	AR00567CIAL
Internet article code	E10OGL033CIAL
Temperature Range	-10 to 105°C
Top/Bottom Diameter	Top: NS 15/25 Bottom: 11 mm
Connecteur	Women's banana ø4mm
Body	PEEK

Compatible with tips & sample holders

Learn more on the dedicated pages.

Rotating Disk Electrode (RDE) : OrigaTrod

Article reference	X13OGL018C	X130GL018R
Internet article code	X13OGL018C	X130GL018R
Type	-	EDI101
Grinded	14.5/23	14.5/23
RPM	100 to 10 000	100 to 10 000
Precision	0,35%	0,35%
Diameter of lower part	11 mm	11 mm

Perform reliable and accurate kinetic measurements with the Rotating Disk Electrode (RDE).

- *Controlled by speed controller: OrigaBox (CTV101 from RadioMeter).*
- *Compatible with tips & sample holders (Radiometer too).*

Speed controller for RDE: OrigaBox

12 cm
14,2 cm

- **Control rotation speed**

- **By USB, analog setpoint or RS232**

- **Can be used alone or connected to a potentiostat**

How to use it with a potentiostat?

First solution: manual control

Thanks to the OrigaLys software: OrigaBox Interface, connected via USB. This solution is possible with OrigaLys potentiostat or any other brand.

2024 rpm

0 rpm

Second solution: automatic control

OrigaLys: The rotation speed is controlled by OrigaMaster, the PC software that controls the potentiostat.

Other brand: The rotation speed is controlled by the PC software that controls the potentiostat. An analog or RS232 signal is required, contact us.

Choose a complete solution: OrigaTrod kit

Opt for a complete solution with the OrigaTrod Kit including: the OrigaTrod, the OrigaBox (connectable via USB to the software on a PC), a USB key containing the control software (OrigaBox Interface) and the appropriate cables. The pads and sample holders are not included.

Rotating Disk Electrode Lt: OrigaTrod Lt

Potentiometer:
Manual control of the rotation speed directly on the device.

BNC

	With potentiometer	With analog instruction and banana plug	With analog instruction
Article reference	**AR00436CIAL**	**AR02633CIAL**	**AR00426CIAL**
Internet article code	AR00436CIAL	AR02633CIAL	AR00426CIAL
Grinded	14.5/23	14.5/23	14.5/23
RPM	100 to 5 000	100 to 5 000	100 to 5 000
Precision	0,35%	0,35%	0,35%

External power supply

The system must be directly powered by a 12V AC/DC adapter (except for AR02633CIAL).

All our **tips** for Origa**Trod** & Sta**Trod**

Length	20 mm
Outer diameter	11 mm
Body	PEEK (PTFE on request)

For example:
Glacial Carbon
Ø3mm

Available tips: *Ø1, 2, 3 or 5 mm*

Matériaux	Diamètre (mm)	Matériaux	Diamètre (mm)
Acier inoxydable 316L	2 et 5	Nickel	2 et 5
70% Cuivre et 30% Nickel	5	Nickel, pureté à 99,99%	5
Argent	2 et 5	Peek	0
Acier Carbone XC38	5	Platine	2 et 5
Cuivre	2 et 5	Platine, pureté à 99,99%	5
Carbone Vitreux	3 et 5	Etain	5
Or	2 et 5	Titane	2 et 5
Aluminium	3 et 5	Tungstène	1
Fer	5	Zinc	2 et 5

Contact us for more information regarding the following tips: Chrome (Cr), Irridium (Ir), Palladium (Pd), Rhodium (Rh), Cobalt (Co) or any other materials.

Compatible with the following electrodes:

OrigaTrod: OrigaLys Rotating Disk Electrode

EDI101: Radiometer Rotating Disk Electrode

OrigaTrod Lt: Rotating Disk Electrode with potentiometer

StaTrod : Static electrode

Discover our range of pellets

Thicknesses	BDD: 1 mm Other pellets: 3 mm
Diameters	8 or 15 mm

Available pellets: Ø8 or ø15 mm

Materials	Diameter (mm)
Steel A37	8
Stainless Steel AISI430	8 et 15
316L stainless steel	8 et 15
Stainless steel Z30Cr13	15
Aluminium	8
Silver	8
Glassy carbon	8 et 15
Copper	8 et 15
Boron Doped Diamond (BDD)	8 et 15
Iron	8
Graphite	8
Nickel	8 et 15
Gold	8
Platinum	8
Tungsten	8

316L stainless steel

15 mm

DDB

8 mm
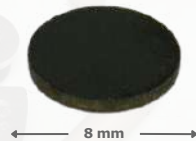
OrigaLys Pellets can be used with sample holders. The body is made of PEEK (PolyEther Ether Ketone).

Discover our range of sample holders

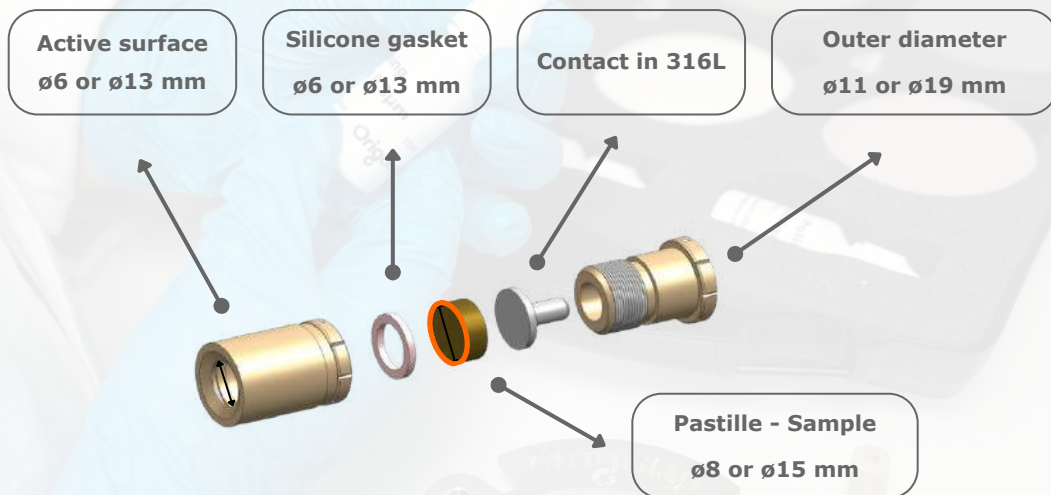| Item code	Ø8 mm : E11OGL001CIAL Ø15 mm : E11OGL006CIAL
Temperature range	-10 to 105°C
Length	17 mm

Active surface
ø6 or ø13 mm

Silicone gasket
ø6 or ø13 mm

Contact in 316L

Outer diameter
ø11 or ø19 mm

Pastille - Sample
ø8 or ø15 mm

Article reference	Sample tablet holder
AR00716CIAL	Titanium rod ø8 assembled
AR00717CIAL	Titanium rod ø15 assembled
AR02711CIAL	Stainless steel rod ø8 assembled
AR02712CIAL	Stainless steel rod ø15 assembled

Article reference	Seal kit for sample tablet holder
AR02713CIAL	Set of 5 silicone seals for ø8 sample holder
AR00577CIAL	Set of 5 PTFE gaskets for ø8 sample holder
AR00578CIAL	Set of 5 PTFE flat gaskets for ø15 sample holder
AR00906CIAL	Set of 5 flat silicone gaskets for sample holder ø15

Discover our tip polishing kit

1	Steel polishing stand
2	5 P1200 polishing discs
3	5 P600 polishing discs
4	5 satin polishing discs
5	5 felt polishing discs
6	3 bottles of alumina: 1 x 2-3 µm + 1 x 1 µm + 1 x 0.3µm

Article reference : AR01647CIAL

- *Achieve reliable & accurate measurements with our tip polishing kit.*

- *Achieve smooth surfaces for accurate analysis.*

- *Reduce edge effects for reliable measurements.*

- *Improve reproducibility with consistent sample preparation.*

Access the user manual

Read more

Non-combined selective electrodes

S7

Screw S7 socket

103 mm

103 mm

103 mm

Article reference	AR02342	AR02341	AR02343
Internet article code	OGS001	OGS002	OGS003
Type	ISE25F	ISE25Ca	ISE25NO3
Ions	F^-	Ca^{2+}	NO_3^-
Concentration (M)	2×10^{-6} to 10^{-1}	5×10^{-7} to 10^{-1}	7×10^{-6} to 1
Concentration (ppm)	0.02 to 1900	0.2 to 4010	0.4 to 62000
Temperature Range	5 to 50°C	5 to 50°C	5 to 50°C
Diameter	12 mm	12 mm	12 mm
pH range	4 à 8	3.5 à 11	2 à 11
Interfering ions	OH^-	Al^{3+}, Fe^{2+}, Ba^{2+}, Sr^{2+}, Cu^{2+}, Na^+, Mg^{2+}, K^+, NH_4^+, Li^+	Cl^-, HCO_3^-, NO_2^-, CH_3COO^-, F^-, SO_4^{2-}

Article reference	AR02628	AR02345	AR02362
Internet article code	OGS004	OGS005	OGS006
Type	ISE25S	ISE25Pb	ISE21Na
Ions	S^{2-}	Pb^{2+}	Na^+
Concentration (M)	10^{-7} to 1	10^{-6} to 10^{-1}	10^{-7} to 3
Concentration (ppm)	0.003 to 32000	0.2 to 20800	0.002 to 69000
Temperature Range	5 to 50°C	5 to 50°C	5 to 80°C
Diameter	12 mm	12 mm	12 mm
pH range	13 to 14	3 to 7	9 to 12
Interfering ions	Ag^+, Hg^{2+}	Cd^{2+}, Ag^+, S^{2-}, Cu^{2+}, Fe^{2+}, Fe^{3+}, Hg^{2+}	Ag^+, Li^+, K^+, Ti^+

Electrodes sélectives non-combinées

S7

Screw Head S7

103 mm

103 mm

103 mm

Article reference	AR00506ISEMONOCU	AR02351	AR02547
Internet article code	AR00506ISEMONOCU	OGS008	OGS009
Type	ISE25Cu	-	ISE25K
Ions	Cu^{2+}	Pb^{2+}	K^+
Concentration (M)	10^{-7} to 1	10^{-6} to 10^{-1}	10^{-6} to 1
Concentration (ppm)	0.006 to 64000	0.2 to 20800	0.04 to 39000
Temperature Range	5 to 50°C	5 to 50°C	5 to 50°C
Diameter	12 mm	12 mm	12 mm
pH range	2 to 7	3 to 7	1 to 9
Interfering ions	Ag^+, Hg_2^{2+}, S^{2-}, Br^-, Cl^-	Cd^{2+}, Ag^+, S^{2-}, Cu^{2+}, Fe^{2+}, Fe^{3+}, Hg^{2+}	Rb^+, Cs^+, NH_4^+, Na^+, Ca^{2+}, Mg^{2+}, Li^+

Combined selective electrodes

S7

Screw Head S7
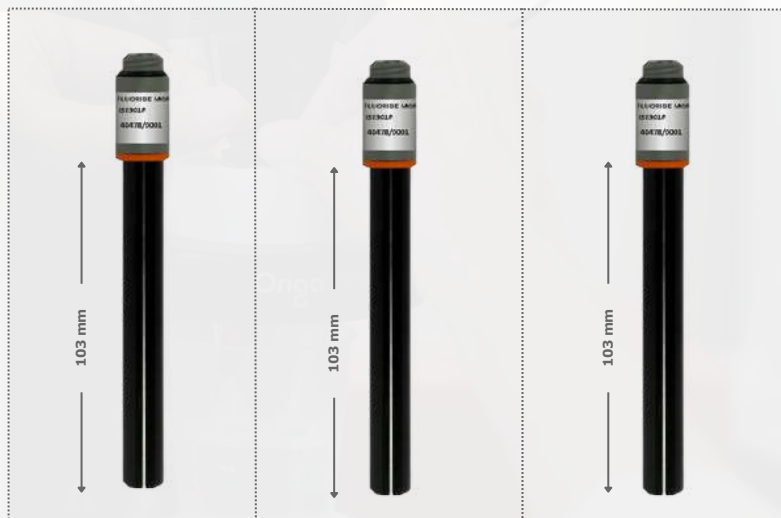
Article reference	AR02344	AR0204	AR003541ISEPB
Internet article code	OGS201	OGS204	AR003541ISEPB
Type	-	ISE25S	-
Ions	F^-	S^{2-}	Pb^{2+}
Concentration (M)	10^{-6} to 10^{-1}	10^{-7} to 1	10^{-6} to 10^{-1}
Concentration (ppm)	0.02 to 1900	0,003 to 32000	0,2 to 20800
Temperature Range	5 to 50°C	5 to 50°C	5 to 50°C
Diameter	12	12	12
pH range	4 to 8	13 to 14	3 to 7
Interfering ions	OH^-	Ag^+, Hg^{2+}	Cd^{2+}, Ag^+, S^{2-}, Cu^{2+}, Fe^{2+}, Fe^{3+}, Hg^{2+}

We also offer other models. In fact, all our non-combined selective electrodes are available in a combined version. For more information, please do not hesitate to contact us.

Combined pH electrodes

S7

Screw Head S7

103 mm

103 mm

103 mm

Article reference	AR02336	AR02339	AR00721
Internet article code	OGPH201	OGPH202	OGPH203
Type	pHC2401	pHC3001	pHC3005
Temperature Range	-5 to 80°C	-5 to 80°C	-5 to 80°C
Combined	Yes	Yes	Yes
Grinded	No	No	No
Diameter	12 mm	12 mm	12 mm
pH Range	0-12	0-12	0-12
Reference element	Ag/AgCl	Ag/AgCl	Ag/AgCl
Liquid Junction	Annular	Porous Pin	Porous Pin
Corps	Glass	Glass	Epoxy
Solution électrolytique	KCl 3M + AgCl saturated	KCl 3M + AgCl saturated	KCl 3M + AgCl saturated

		For aggressive environments	**Long combination**

Article reference	AR02353	AR02348	AR02311
Internet article code	OGPH204	OGPH208	OGPH207
Type	pHC3011	–	XC161-9
Temperature Range	-5 to 80°C	0° to 100°C	0 to 80°C
Combined	Yes	Yes	Yes
Diameter	12 mm	12 mm	12 mm
pH Range	0-14	0-14	0-12
Reference element	Ag/AgCl	Ag/AgCl	Ag/AgCl
Liquid Junction	Porous Pin	Porous Pin	Porous Pin
Body	Glass	Glass	Glass
Electrolytic solution	KCl 3M + AgCl saturated	KCl 3M + AgCl saturated	KCl 3M + AgCl saturated

Combined pH electrodes

S7

Screw Head S7

255 mm

Article reference	AR01234
Internet article code	OGPH205
Type	pHC3006L
Combined	Yes
Temperature Range	0 to 80°C
Diameter	6.5 mm
Electrolytic solution	KCl 3M + AgCl saturated
Reference element	Ag/AgCl
Body	Glass
pH Range	0 - 12
Liquid Junction	Porous Pin

Non-combined pH electrodes

S7

Screw Head S7

103 mm

103 mm

Article reference	AR02337	AR02338
Internet article code	OGPH001	OGPH002
Type	pHG301	pHG311
Combined	No	No
Temperature Range	-5 to 80°C	-5 to 80°C
Diameter	12 mm	12 mm
Electrolytic solution	KCl	KCl
Reference element	Ag/AgCl	Ag/AgCl
Body	Glass	Glass
pH Range	0-12	0-14

pH electrodes (integrated temperature probe)

S7

Screw Head S7

Article reference	AR02355	AR02629
Internet article code	OGPH301	OGPH301L3M
Type	PHC3085	PHC3085
Combined	Yes	Yes
Temperature Range	-5 to 80°C	-5 to 80°C
Diameter	12 mm	12 mm
Reference element	Ag/AgCl	Ag/AgCl
pH Range	0-12	0-12
Temperature probe	Yes, integrated 1 M	Yes, integrated 3 M
Liquid Junction	Porous Pin	Porous Pin

Conductivity cells

S7

Screw Head S7

Article reference	**AR02340**	**AR02315**
Internet article code	OGEPOXY001	OGEPOXY002
Type	CDC754-9 with 2 graphite plates (C)	CDC745-9 with 2 platinum plates (Pt)
Temperature Range	0 to 100°C	0 to 100°C
Diameter	12 mm	12 mm
Number of poles	2	2
Compatibility	CM210/230, CDM92 / CDM83	CM210/230, CDM92 / CDM83
Body	Epoxy	Epoxy
Replatinable	No	Yes

103 mm

103 mm

Conductivity cells

S7   Screw Head S7

MiniDin6

103 mm

Article reference	AR02356	AR02316
Internet article code	OGCGLASS001	OGCGLASS002
Type	XE100 with 2 platinum plates (Pt)	-
Temperature Range	0 to 100°C	0 to 100°C
Diameter	12 mm	12 mm
Number of poles	2	2
Compatibility	CM210/230, CDM92 / CDM83	OCD218 and other (with adapter)
Body	Glass	Glass
Replatinable	Yes	Yes
Connections	Screw Head S7	Din6
Temperature probe	No	Yes

Industrial electrodes

	Reference electrode	Auxiliary electrode
S7	120 mm / 90 mm	120 mm / 95 mm
Screw Head S7		

Article reference	**AR00301**	**AR00302**
Internet article code	AR00301	AR00302
Type	Industrial	Industrial
Reference/sensitive element	Ag/AgCl (gel)	Platinum wire (Pt) ø: 1mm Length: 10 mm
Temperature Range	-10 to 100°C	-5 to 80°C
Lower diameter	6 mm	8 mm
Body	Verre	Verre
Grinded	No	PG 13.5 screwing
Liquid Junction	Porous Pin	-
Electrolytic solution	3M KCl with saturated AgCl	-

Other electrodes

S7

Screw Head S7

	ORP/Redox		Karl Fischer titration
Article reference	**AR02346**	**AR02360**	**AR02347**
Internet article code	OGVR001	OGVR003	OGK001
Type	MC3051Pt	MC6091Ag	M231pt2
Reference/sensitive element	Ag/AgCl - Platinum ring	Ag	2 platinum wires
Temperature Range	0 to 80°C	0 to 60°C	-10 to -100°C
Lower diameter	8 mm	12 mm	12 mm
Body	Glass	-	-
Liquid junction	Porous Pin	-	-
Electrolytic solution	3M KCl with saturated AgCl	-	-

	Temperature probe	**Platinum specific counter electrode**
Cinch (RCA)	103 mm	103 mm
Screw Head S7		
Article reference	**AR00427CIAL**	**AR02331**
Internet article code	AR00427CIAL	OGV009
Type	T201	-
Compatibility	PHM2XX, CDM2XX / PHM9X	-
Temperature Range	-10 to 105°C	-
Lower diameter	7.5 mm	-
Connection	Cinch	Screw Head S7
Body	PEEK	Glass
Material	Titanium	1x30mm platinum wire
Cable	RCA/RCA included	-
Grinded	No	RIN 10/19

Filling solutions (REF, allonges, pH combinées en verre)

Article reference	AR00806	AR00278	AR01269	AR02423
Internet article code	AR00806	AR00278	AR01269	AR02423
Solution type	Saturated KCl	3M saturated KCl (Ag/AgCl)	K_2SO_4 saturated	KOH 0.1 M
Quantity	250 mL	250 mL	500 mL	250 mL

Conductivity solutions

Article reference	AR01876	AR01880	AR01878	AR01879
Internet article code	AR01876	AR01880	AR01878	AR01879
Solution type	1.413 mS to 25°C	12.85 mS to 25°C	111.80 mS to 25°C	1.408 mS to 25°C
Quantity	500 mL	500 mL	500 mL	500 mL

Article reference	AR02523	AR01877	AR01881
Internet article code	AR02523	AR01877	AR01881
Solution type	1.015 mS to 25°C	12.88 mS to 25°C	111.31 mS to 25°C
Quantity	500 mL	500 mL	500 mL

pH solutions

Article reference	AR01380	AR01380	AR01381
Internet article code	AR01380	AR01380	AR01381
Solution type	For pH electrodes 4.005 ± 0.010 at 25°C	For pH electrodes 7.005 ± 0.010 at 25°C	For pH electrodes 9.180 ± 0.010 at 25°C
Quantity	250 mL	250 mL	250 mL

What solution for my REF electrode?

Internet article code	Article reference	Type	Type of electrodes	Filling solution
OGR001	AR02317	XR400	Mercury oxide (Hg/HgO) without grinded 120 mm	KOH 0.1M
OGR002	AR02318	XR400	Mercury oxide (Hg/HgO) with grinded 120 mm	KOH 0.1M
OGR003	AR02319	XR110	Calomel Saturated (ECS) with grinded 120 mm	Saturated KCl
OGR004	AR02320	REF421	Calomel Saturated (ECS) without grinded 103 mm	Saturated KCl
OGR005	AR02321	REF321	Silver chloride (Ag/AgCl) without grinded 103 mm	3M KCl saturated with Ag/AgCl
OGR006	AR02322	XR300	Silver chloride (Ag/AgCl) diameter inf. without grinded 120 mm	3M KCl saturated with Ag/AgCl
OGR007	AR02323	XR300	Silver chloride (Ag/AgCl) 6 mm lower diameter without grinded 120 mm	3M KCl saturated with Ag/AgCl
OGR008	AR02314	REF201	RedRod without grinded 103 mm	Saturated KCl
OGR009	AR02309	REF921	Calomel Saturated (ECS) non-aqueous medium without grinded 103 mm	LiCl 1M
OGR010	AR02324	-	Silver chloride (Ag/AgCl) without grinded 120 mm	3M KCl saturated with Ag/AgCl
OGR011	AR02313	-	Mercury sulfate (Hg/Hg$_2$SO$_4$) With grinded 120 mm	K$_2$SO$_4$ saturé
OGR012	AR02350	REF621	Mercury sulfate (Hg/Hg$_2$SO$_4$) Without grinded 103 mm	K$_2$SO$_4$ saturé
AR00301	AR00301	Industrial	Silver chloride (Ag/AgCl) without grinded 120 mm	Saturated KCl gel
OGR013	AR02352	-	Copper sulfate (Cu/CuSO$_4$) Without grined 103 mm	CuSO$_4$

Calibration / Buffer Solutions (ISAB / TISAB)

We provide you with a wide range of solutions adapted to your needs for your selective electrodes:

> Calibration solutions
> ISAB / TISAB solutions

For any additional information, do not hesitate to contact us.

Cell for OrigaStat: OrigaCell Complete Kit

Article reference: X11OGL001CIAL

Article reference: X10OGL004

The OrigaCell Kit is composed of <u>4 parts</u>:

① **Plastic protective cover**

② **Electrode holder with LED cell lighting**

③ **Beaker holder (glass or plastic beaker, 30 to 125mL)**

④ **Base with retention tray**

Exclusively with the OrigaStat range: each part can be adjusted or removed.

Ideal for teaching and surface treatment.
> See our specific packs.

Please note, the OrigaMix (magnetic stirrer) is not part of the kit.
Exchangeable
Swiss-made motor
100 to 1500 rpm
• **For OrigaStat only**

OGS100
without OrigaCell Kit
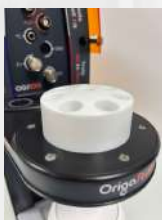
①   ②   ③   ④

OGS100
with OrigaCell Kit

Thermostatic corrosion cell (CCTO/TH)

22,9 cm²

200 mL

This corrosion cell is perfect for surface treatment and for flat samples with large surface area.

Available in:
- **thermostated**
- **non-thermostated**

Ideal cell for crevice corrosion and surface treatment testing.

Article reference:
AR00780CIAL

Corrosion cell (TYPE CEC/TH)

1,33 cm²

200 mL

This thermostatically controlled corrosion cell (Flow Cell) is perfect for galvanic corrosion on surfaces less than 2 cm² and for disk samples.

It includes a sample holder and a platinum (Pt) counter-electrode:
- **Sample diameter: 1.5 cm**
- **Pt counter-electrode: ø10 mm**
- **Ag/AgCl reference electrode**
- **Temperature probe**

Article reference:
AR01225CIAL

Galvanic corrosion cell

Red cap
(electrode not inserted)

1st sample

Speed to
maintain

2nd sample

Working electrode

**Article reference:
AR00828CIAL**

This galvanic corrosion cell (Flow Cell) is perfect for surface treatment tests and for flat samples. It is designed for flat samples with a large surface area. Position your electrodes wherever you want: up to 9 locations.

This thermostated cell includes:

* Active surface: ø133 mm
* Maximum sample width: 158 mm
* Maximum sample length: unlimited

100 cm²   2,5 L

Flow Cell Corrosion Cell

This flow-through corrosion cell is perfect for erosion corrosion of disk samples. Flow an electrolyte through the cell.

This thermostated cell includes:

- Active surface: ø13 mm
- A Calomel reference electrode
- A platinum disk counter-electrode ø10 mm

1,33 cm²   A flux

REF

Flow via 3 inputs/outputs

Working electrode

AUX

WE

Sample

Empty the cell
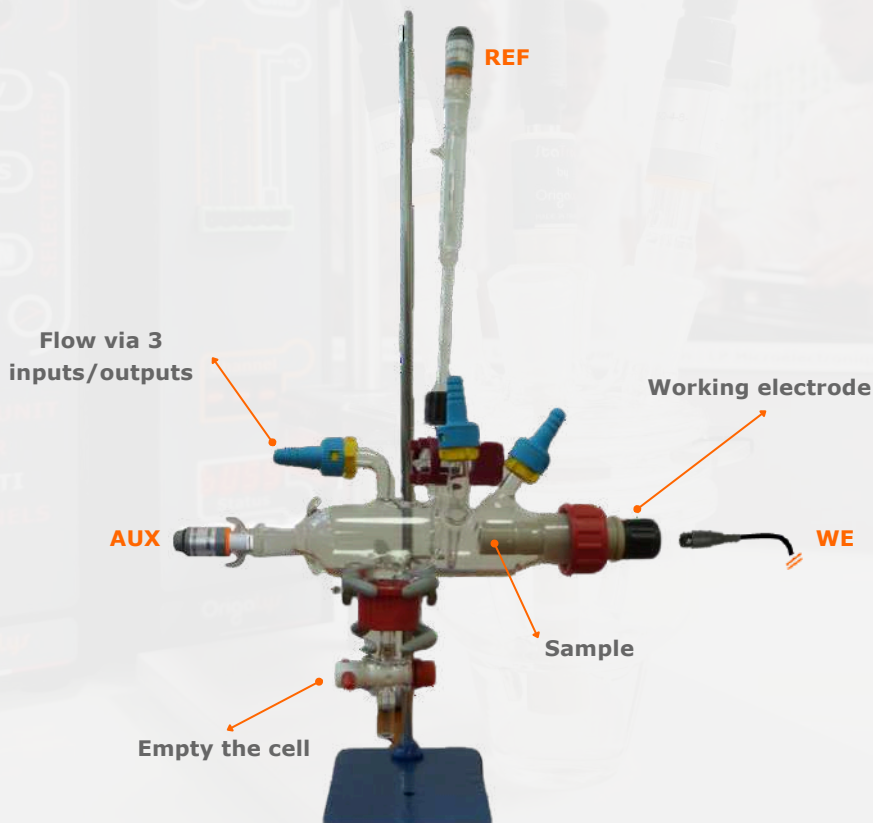
Article reference:
AR00335CIAL

Thermostatic hydrogen **permeation** cell

The Devanathan-Stachursky thermostated hydrogen permeation cell is used to study and measure the diffusion of hydrogen gas through materials.

This thermostated cell includes:

- **Active surface: ø16 mm**
- **Two reference electrodes**
- **Two platinum disk counter-electrodes ø10 mm**
- **Two temperature probes**

Article reference:
AR01223CIAL

Cells with RDE stand (OrigaTrod)

Large model:

This stand for EDT is composed of:

- **Standard stand** with sturdy base and the height is easily adjustable.
- **A glass cell**: the volume can vary on request. This cell can also be thermostatically controlled.

With its 5 openings, the cell is perfectly suited for a rotating electrode, a working electrode, a reference electrode and a counter electrode.

Small model:

This stand for EDT is composed of:

- **Standard stand** with sturdy base and the height is easily adjustable.
- **A glass cell**: the volume can vary on request. This cell can also be thermostatically controlled.

With its 5 openings, the cell is perfectly suited for a rotating electrode, a working electrode, a reference electrode and a counter electrode.

Glass cells with stand

Article reference:
AR00735CIAL

This stand for EDT is composed of:

- **Standard stand** with sturdy base and the height is easily adjustable.
- **A glass cell**: the volume can vary on request. This cell can also be thermostatically controlled.

With its 5 openings, the cell is perfectly suited for a rotating electrode, a working electrode, a reference electrode and a counter electrode.

Article reference:
AR02052CIAL

This stand for EDT is composed of:

- **Standard stand** with sturdy base and the height is easily adjustable.
- **A glass cell**: the volume can vary on request. This cell can also be thermostatically controlled.

With its 5 openings, the cell is perfectly suited for a rotating electrode, a working electrode, a reference electrode and a counter electrode.

Glass or plastic cells

Number	1	2	3	4	5	6
Article reference	AR00369	AR02103CIAL	AR00483	AR00471	AR01130	AR01129
Max volume.	150 ml	150 ml	150 ml	130 ml	100ml	100 m
Material	Glass	Glass	Glass	Plastic (beaker)	Glass	Glass
Thermostated	Yes	No	Yes	No	Yes	No
Compatibility	All	All	All	All	OrigaStat*	OrigaStat*

Only usable with the OrigaStat OrigaCell Kit

For all other cell requests, contact us!

Accessories for electrodes & cells

Article reference: AR00325

The adaptable electrode holder is an essential device designed to hold electrodes in place during electrochemical experiments.

It offers great versatility and adapts to all types of electrodes.

Article reference: AR00373

Stopper for electrochemical cell: ensures perfect sealing, preventing leaks, contamination and evaporation of the electrolyte.

Article reference: AR00905

Bubbler tube: ideal for controlling the gas atmosphere of an electrochemical cell, by precisely diffusing a gas into the electrolyte.

Article reference: AR01004

Hole plug for lapping: designed to hold the electrodes while ensuring sealing and stability in the cell.

Battery holders (button CR2032, AA, AAA)

Button cell type CR2032

Button cell type CR2032

ARTICLE REFERENCE	AR01190CIAL	AR01498CIAL
Number of measurement points	4	4
Operating ranges	-30° to 80°C	-30° to 80°C
Temperature probe	Integrated (PT1000)	Integrated (PT1000)
Temperature measuring range	-55°C to 155°C	-55°C to 155°C
Dimensions (L x W x H) in mm	70 x 32.5 x 13	70 x 32.5 x 13
Comments	Insertion on the front	Insert on top

Pile AAA (LR03)

Pile AA (LR06)

ARTICLE REFERENCE	AR02156CIAL	AR02157CIAL
Number of measurement points	4	4
Operating ranges	-30° to 70°C	-30° to 70°C
Temperature probe	Integrated (PT1000)	Integrated (PT1000)
Temperature measuring range	-55°C to 155°C	-55°C to 155°C
Dimensions (L x W x H) in mm	97,5 x 32,5 x 13	105,2 x 32,5 x 13

Battery holders (super capacitor & 18650)

Super capacitor

18650 battery (unprotected or protected)

ARTICLE REFERENCE	AR02162CIAL	AR02552CIAL
Number of measurement points	4	4
Operating ranges	-40° to 100°C	-30° to 70°C
Temperature probe	Integrated (PT1000)	Integrated (PT1000)
Temperature measuring range	-55°C to 155°C	-55°C to 155°C
Dimensions (L x W x H) in mm	105,2 x 32,5 x 13	97,5 x 32,5 x 13

SPE support for screen printed electrodes

ARTICLE REFERENCE	AR02639CIAL
Dimensions (L x W x H)	55 x 46 x 32 mm
Connections (on OrigaFlex range)	Phoenix connector: 4 electrodes + temperature
Connections (on other devices)	2mm bananas: 3 electrodes

Swagelok (3 and 2 electrodes) in PFA material
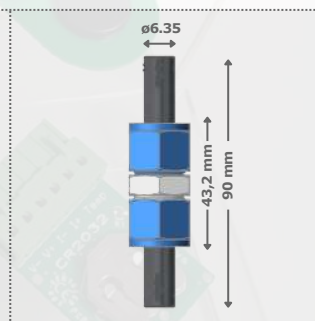

	3 electrodes	2 electrodes
ARTICLE REFRENCE	**AR02647**	**AR02648**
SUPPORT REFRENCE	AR02695	AR02660
T°C PROBE REFERENCE	AR02657	AR02657
Diameter	Ø12.7 / 1/2''	Ø12.7 / 1/2''
Material	PFA	PFA
Number of electrodes	3	2

With supports

	3 electrodes	2 electrodes
ARTICLE REFRENCE	**AR02651**	**AR02649**
SUPPORT REFRENCE	AR02696	AR02697
T°C PROBE REFERENCE	AR02658	AR02658
Diameter	Ø6.35 / 1/4''	Ø6.35 / 1/4''
Material	PFA	PFA
Number of electrodes	3	2

Compatible with all brands of potentiostats.

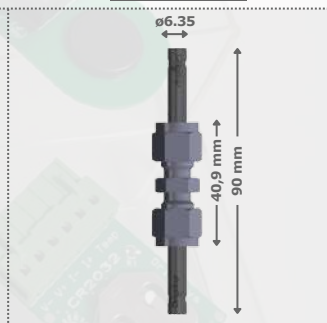# Swagelok in 316L stainless steel
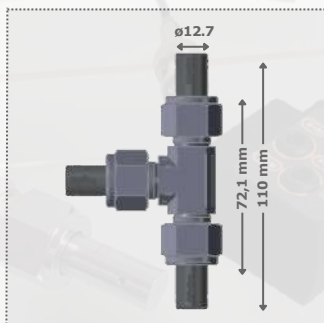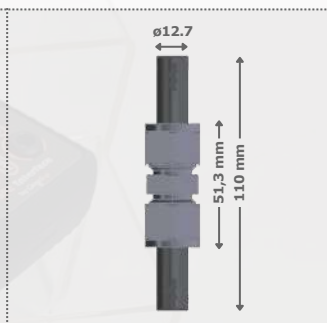
	3 electrodes	2 electrodes
	ø12.7 — 72,1 mm / 110 mm	ø12.7 — 51,3 mm / 110 mm
ARTICLE REFERENCE	AR02656	AR02655
SUPPORT REFERENCE	AR02695	AR02660
T°C PROBE REFERENCE	AR02657	AR02657
ELECT. INSULATOR REFERENCE.	AR02652	AR02652
Diameter	Ø12.7 / 1/2''	Ø12.7 / 1/2''
Material	316L stainless steel	316L stainless steel
Number of electrodes	3	2
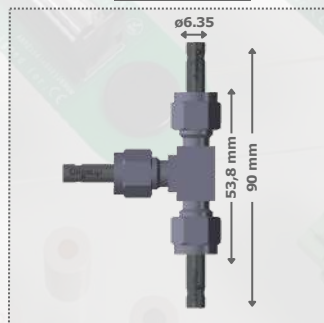
	3 electrodes	2 electrodes
	ø6.35 — 53,8 mm / 90 mm	ø6.35 — 40,9 mm / 90 mm
ARTICLE REFERENCE	AR02653	AR02654
SUPPORT REFERENCE	AR02696	AR02697
T°C PROBE REFERENCE	AR02658	AR02658
ELECT. INSULATOR REFERENCE.	AR02652	AR02652
Diameter	Ø6.35 / 1/4''	Ø6.35 / 1/4''
Material	316L stainless steel	316L stainless steel
Number of electrodes	3	2

Compatible with all brands of potentiostats.

Temperature probes for Swagelok

For Swagelok 1/2''

84.6 mm
ø12.7
ø15.7

ARTICLE REFERENCE	AR02657
Diameter	Ø12.7 / 1/2''
Material	316L stainless steel
T°C measuring range	-10°C to 105°C*

*Possibility to extend the measuring range

For Swagelok 1/4''

94.6 mm
ø6.35
ø12.7

ARTICLE REFERENCE	AR02658
Diameter	Ø6.35 / 1/4''
Material	316L stainless steel
T°C measuring range	-10°C to 105°C*

*Possibility to extend the measuring range

Aux

°C

Gnd

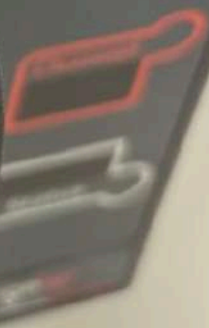BUILT

SELECTED ITEM

IS

LIN

RIVE UNIT
FOR
MULTI
CHANNELS

Orgalys

A+ (Ref2)

Orgalys

Orgalys

XC/2(V+)

G2

G2

G2

High input impedance voltage measurement

Add a high impedance input voltage measurement to anywhere in your cell.

ARTICLE REFERENCE	AR01556CIAL
Connectors	BNC
Max. voltage.	±15V
Software	Available on OrigaMaster 5 & OrigaViewer 2
Compatibility	OrigaFlex range & OGS100 / OGS200

Foot pedal control

Operate safely with the OrigaSwitch, our foot pedal control designed for the OrigaBox and OrigaStat.

ARTICLE REFERENCE	AR01526
Connectors	BNC
Max. voltage.	±15V
Software	OrigaMaster & OrigaViewer
Dimensions	10 cm x 7 cm
Compatibility	OrigaFlex range & OGS100 / OGS200

External dummy cell

The OrigaTest is an external, easily transportable dummy cell, allowing:
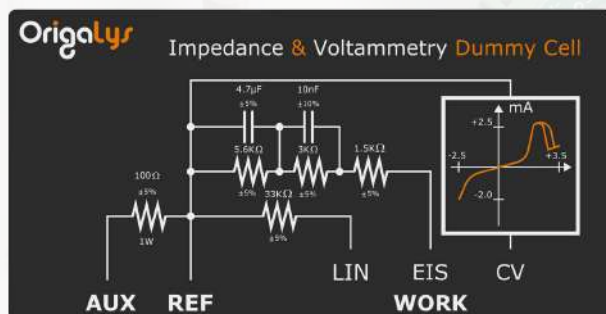

- Verification of the main technical specifications of OrigaLys products: OrigaStat or OrigaFlex.

- To become familiar with the OrigaMaster software; to prepare, launch and examine the experiments.

- Cable control. This allows us to determine whether the cables are operational or whether they need to be changed.

ARTICLE REFERENCE	AR00792
Connectors	Banana 4mm
Weight	0,150 kg
Dimensions (L x W x H) in mm	12 x 6,4 x 4 cm
Compatibility	OrigaStat & OrigaFlex

Main functions of the fictitious cell:

- Linear Voltammetry (LIN)
- Cyclic Voltammetry (CV)
- Impedance (EIS), double loop

- Auxiliary (AUX)
- Reference (REF)
- Work (WRK)

- 2 or 3 electrodes
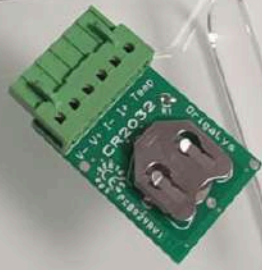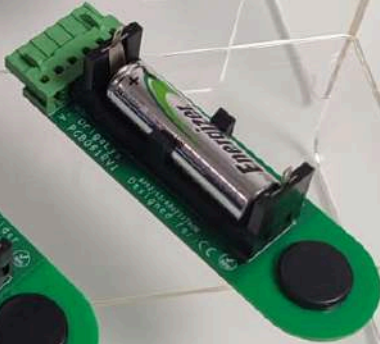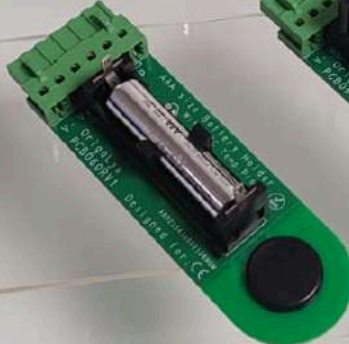
Connectors, cables and adapters

	S7	Male banana ø2mm	Male banana ø4mm	BNC	MiniDin6
Male banana ø4mm	AR01206 (1m) B AR01207 (2m) B		AR01204 (1m) B AR00550 (1m) R AR00580 (2m) B AR00579 (2m) R AR01265 (5m) B AR01266 (5m) R	AR01189 (0.25m) B AR01214 (1m) B AR01194 (2m) B	
BNC	AR01211 (0.25m) B AR01210 (1m) B	AR01910 (1m) Y AR01911 (1m) G AR01197 (1m) B AR01201 (1m) R AR01591 (2m) Y AR01596 (2m) G AR01593 (2m) B AR01599 (2m) R AR01600 (3m) Y AR01595 (3m) G AR01594 (3m) B AR01598 (3m) R	AR01189 (0.25m) N AR01214 (1m) N AR01194 (2m) N	AR01570 (1m) B AR00556 (2m) B AR00341 (5m) B	
UHF	AR01219 (1m) B		AR01191 (0.25m) B AR01203 (1m) B AR00455 (2m) B		
S7		AR01205 (1m) B	AR01206 (1m) B AR01207 (2m) B	AR01211 (0.25m) B AR01210 (1m) B	AR01635 (1m) B

Cable color: Y: Yellow / G: Green / B: Black / R: Red

| S7 | Male banana ø2mm | Male banana ø4mm | BNC | UHF | MiniDin6 |

- **Cable adapter** for OCD Mini-DIN6 male / DIN6 screwed female / 15 cm (AR01544)

- **Banana adapters and crocodile clips** (insulated in ø2mm and insulated and non-insulated in ø4mm) for male banana ø2mm, male banana ø4mm:
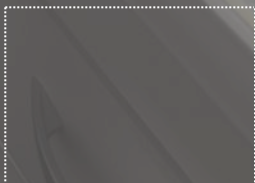

| AR01208 | AR00677 | AR01217 ø2mm | AR01038 ø2mm | AR01937 ø2mm | AR01216 ø4mm | AR01572 ø4mm | AR01571 ø4mm |

AR01230 - 14/01/2025

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